



Sabroe chiller plant controller

Integrated solution for managing and monitoring controls equipment in chiller plants.

The Sabroe chiller plant controller is a compact, easy-to-install control panel. It contains a pre-programmed PLC system and touch panel for monitoring and controlling a wide range of external equipment that is not part of the chiller itself, but that serves the chilled-water distribution system as well as other key equipment in the chiller plant.



| Advantages | Benefits |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Competitively priced control and monitoring solution | Easy to opt for the Sabroe Chiller Plant Controller, which will save you additional shop stops |
| Know-how and experience from the market leader within industrial refrigeration and chilled-water systems combined into one single control box | Ensures maximum efficiency and uptime of the complete chilled-water system |
| Pre-vetted, documented, and intelligently engineered solution, designed to fit the industrial refrigeration requirements | Saves you a lot of time on electrical engineering, design, documentation, installation, and commissioning |
| Comprehensive and well thought-out user features | Saves you valuable time in daily use and enables fully informed decisions |



Remote access



Complete chiller plant

The chiller plant controller includes:

- Differential pressure monitoring and control of pumps on the consumer side of the buffer tanks
- Buffer tank temperature control function, with remote start/stop of chillers
- Low-temperature protection of condenser circuit
- Optimum condensing pressure control of condenser side to match changing outdoor conditions
- Monitoring of temperatures and pressures and of the functioning of switches, motors, and valves
- Choice of direct or VSD drive control for each motor - VSD control can be by conventional digital/analogue signals or by Profinet data communication with the VSDs
- Remote monitoring and plant operation capability, via internet
- Remote monitoring of connected UniSABs

The Sabroe chiller plant controller provides users with straightforward on-screen configuration of equipment throughout the chiller plant. You simply select the number and type of chillers, the type and number of condensers, the condenser control method, and the distribution system design, including buffer tank option.

You simply click on the number and functions of sensors, valves, pumps, and fans.

Cross-check list for project alignment test is available on request.

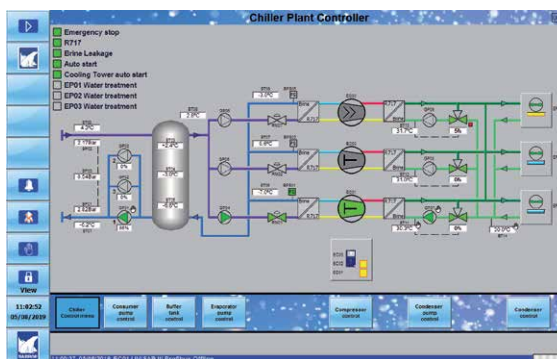
Connectivity options

The chiller plant controller is available with a 3G/4G modem and VPN router for wireless internet connection.

The type and make of drive for pumps and for condenser fans are configurable. You can choose between conventional starter methods and VSD. The VSD option means you can use Danfoss and ABB VSD drives featuring Profinet connectivity and extended monitoring.

Control panel specifications

| | |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cabinet | 1200 x 800 x 300 mm (HxWxD) painted steel plate, IP44 |
| Connectivity | Touch panel: Ethernet interface for remote monitoring and operation PLC: Ethernet/Profinet interface for software service and connectivity to VSDs |
| Main components | Main switch, 24V DC power supply, relays and terminals, Siemens S7-1500SP PLC, and 12-inch Siemens Comfort touch panel |



Chillers are controlled by UniSAB